substrate (i.e., the printed circuit board). This, in turn, lead to a device which was not readily manufacturable because there was no way to guarantee good connections between the contact elements and the substrate. By avoiding the one-to-one correspondence between contact elements and contact regions, these embodiments of the present invention reduce the density of the connections to the substrate, thereby achieving a more manufacturable device.

In the foregoing specification, the invention has been described with reference to specific exemplary embodiments thereof. It will, however, be evident that various modifications and changes may be made thereto without departing from the broader spirit and scope of the invention as set forth in the appended claims. For example, although RDRAMs® have been referred to in this application, other types of devices are contemplated, including other DRAMs, integrated circuits, memories, circuit boards, and other components requiring an electrical connection to a substrate. The specification and drawings are, accordingly, to be regarded in an illustrative rather than a restrictive sense.

What is claimed is:

1. An electrical connector comprising a plurality of bus conductors each running through the length of the connector yet being electrically isolated from one another and each having a number of compliant contact regions disposed at various positions along their respective lengths so as to provide electrical coupling points for like contact regions of electrical devices to be received within the connector, the bus conductors being divided into first and second groups such that across the width of the connector a bus conductor of the first group is positioned adjacent to a bus conductor of the second group that is positioned adjacent to yet another bus conductor of the first group, and so on for each of the plurality of bus conductors, the transmission line impedance of any pair of adjacent bus conductors, one being chosen from the first group and the other being chosen from the second group, being determinable, wherein each of the bus conductors of the first group are adapted to be electrically coupled to respective signal paths associated with a circuit board on which the connector is to be mounted through only two electrical contact elements regardless of the number of compliant contact regions, the two electrical contact elements of each bus conductor of the first group being arranged so that each is disposed substantially near an end of its respective bus conductor, and the bus conductors of the second group each being adapted to be electrically coupled to an electrical ground plane associated with the circuit board through a number of electrical contact elements disposed along their respective lengths, the number of electrical contact elements being irrespective of the number of compliant contact regions.

2. A connector as in claim **1** wherein a dielectric spacer is disposed between each adjacent bus conductor of the first and second groups.

3. A connector as in claim **2** wherein said compliant contact regions of said bus conductors comprise fingers offset from respective ones of said bus conductors through a bend.

4. A connector as in claim **2** wherein said compliant contact regions comprise elastomer-backed metal regions.

5. A connector as in claim **1** wherein said compliant contact regions of said bus conductors are made of a Beryllium-Copper (Be—Cu) alloy.

6. A connector as in claim **5** further comprising a dielectric spacer disposed between each adjacent bus conductor of the first and second groups.

7. A connector as in claim **1** wherein said compliant contact regions of said bus conductors comprise elastomer-backed metal regions.

8. A connector as in claim **1** wherein the compliant contact regions of bus conductors of the first group are arranged to contact a first side of the electrical devices and the compliant contact regions of bus conductors of the second group are arranged to contact a second side of the electrical devices.

9. A connector as in claim **8** wherein the compliant contact regions of the bus conductors are made of a Beryllium-Copper (Be—Cu) alloy.

10. A connector as in claim **8** wherein the compliant contact regions of the bus conductors comprise elastomer-backed metal regions.

11. A connector as in claim **8** wherein the compliant contact regions of the bus conductors comprise fingers offset from respective ones of the bus conductors through a bend.

12. A connector as in claim **1** wherein the signal paths comprise a plurality of traces on the circuit board.

13. A connector as in claim **12** wherein the compliant contact regions of the bus conductors comprise fingers offset from respective ones of the conductors through a bend.

14. A connector as in claim **12** wherein the compliant contact regions of the bus conductors comprise elastomer-backed metal regions.

15. A connector as in claim **1** wherein said electrical contact elements of said bus conductors of the first group comprise metal posts.

16. A connector as in claim **15** wherein said electrical contact elements of said bus conductors of the second group comprise metal posts.

17. A connector as in claim **16** wherein said metal posts of said bus conductors of the second group are disposed at approximately equal intervals over the lengths of each of said bus conductors of said second group.

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